

ABSTRACT

A method for high-temperature heat treatment of a stacked load of ligneous material in an enclosed space having a raised-pressure chamber upstream of the load and a recovery chamber downstream of the load, a heater and a blower for continuously circulating a heat-transfer fluid in the enclosed space, sensors for monitoring the temperature and moisture content of the enclosed space, and a spray boom for regulating the temperature and humidity of the enclosed space. The atmosphere in each of the chambers is monitored and measured using the sensors. Data from the sensors is compared and operation of the heater, the blower and the spray boom are simultaneously and uniformly adjusted to perform a heat-treatment cycle which is a function of characteristics of the load of ligneous material and equilibrium between the flow rate and speed of the heat-transfer fluid between the two chambers.